water, just sufficient in quantity to preserve the mass in a semifluid condition, and to prevent the precipitation of any deutochloride of platinum.

Specimens of the salt were exhibited, together with the apparatus employed in the qualitative examination of the compound, the constitution of which was made manifest by proper chemical re-agents.

Dr. Patterson called up the amendment to the by-laws proposed by him on the 15th of March last, and in regard to which due notice had been given. The amendment was adopted as follows:—

If any member shall pay into the hands of the treasurer the sum of fifty dollars, he shall thenceforward be exempted from all annual contributions.

The following candidates were elected Members of the Society:—

Humphrey Lloyd, A. M., of Trinity College, Dublin.

J. K. Paulding, Secretary of the Navy of the United States.

John Ludlow, D. D. Provost of the University of Pennsylvania.

Benjamin W. Richards, of Philadelphia.

George W. Bethune, D. D. of Philadelphia.

George M. Justice, of Philadelphia.

Stated Meeting, May 3.

Present, twenty-two members.

Mr. Du Ponceau, President, in the Chair.

The following donations were received:—

FOR THE LIBRARY.

Memoirs of the Royal Astronomical Society. Vol. X. London, 1838.—*From the Society.*

Transactions of the Society for the Encouragement of Arts, Manufactures, and Commerce. During the session of 1837–8. Vol. LII. Part first. London, 1838.—*From the Society.*

Transactions of the Albany Institute. Vol. II. Nos. 3 and 4. Albany.—*From the Institute.*

Collections of the Rhode Island Historical Society. Vol. IV. Providence, 1838.—*From the Society.*

Elements of Civil Engineering: for the use of Students, and those who may be about to embark in the profession. By John Millington, Civil Engineer, &c. Philadelphia, 1839.—*From Mr. Judah Dobson.*

A Geographical, Commercial, and Agricultural View of the United States of America, forming a complete Emigrants' Directory, &c. By Daniel Blowe. Liverpool, 1820.—*From Mr. John Vaughan.*

Remarks on the Statistics and Political Institutions of the United States, with some Observations on the Ecclesiastical System of America, her Sources of Revenue, &c. By William G. Ouseley, Esq. Philadelphia, 1832.—*From the same.*

Sketches, Historical and Topographical, of the Floridas. By James Grant Forbes. New York.—*From the same.*

Remarks during a Journey through North America, in the years 1819, 1820, and 1821. By Adam Hodgson, Esq. New York, 1823.—*From the same.*

Statistics of South Carolina, including a View of its Natural, Civil, and Military History, general and particular. By Robert Miles. Charleston, 1826.—*From the same.*

Correspondencia que ha Mediado entre la Legacion Extraordinaria de Mexico y el Departamento de Estado de los Estados Unidos sobre el Paso del Sabina por las Tropaz que mandaba el General Gaines. Philadelphia, 1836.—*From Mr. Gorostiza.*

Tables of the Self-registering Anemometer and Rain Gauge, with drawings, and a description. By Mr. Follett Ostler.—*From Mr. G. M. Justice.*

A Peep at China in Mr. Dunn's Chinese Collection; with Miscellaneous Notices relating to the Institutions and Customs of the Chinese, and our Commercial Intercourse with them. By E. C. Wines. Philadelphia, 1839.—*From Mr. Nathan Dunn.*

FOR THE CABINET.

Models of a regular dodecahedron and of a triangular pyramid, in which the planes of cleavage upon the solid angles are shown, executed in mica. By Professor Stephen Alexander, of Princeton. *From the Maker.*

Professor Bache called the attention of the Society to the donation of transparent models of crystals, presented to the Cabinet by Professor Alexander.

He stated that these models had all the advantages of those made from glass, with greater convenience in the construction of them. The thin plates of mica are readily marked with a sharp instrument, and easily cut. The parts are put together with diamond cement, it having been found that this is a much better method of connecting the pieces composing the model, than by cutting the sheets partly through and using the mica as a hinge, which renders the sheets liable to split. The forms resulting from the cleavage of crystals, &c., may be represented in these models as in those of glass.

Dr. Hays made a verbal communication relative to the catoptric examination of the eye, as a means of distinguishing the morbid conditions of the transparent tissues of that organ.

He stated that when a lighted candle is held before an eye, the pupil of which is dilated, and in which there is no obscurity of the transparent tissues, three distinct images of the flame is visible; two upright and one inverted, the latter appearing between the two former.

Experiments made to determine the causes of these reflected images, and the changes which occur in their number, position, &c. have shown that if a light be placed before the convex face of a single watch glass, or of several of them superimposed, one or more upright images of the flame will be seen, according to the number of glasses employed.* Now in the eye there are two superimposed convex surfaces, viz.—1st. the cornea; and 2d. the anterior capsule of the crystalline lens. Thus the formation of the two upright images is explained. Again, if a light be placed before the concave surface of a watch glass, an inverted image is seen. Such a surface exists in the eye, in the posterior capsule of the lens; and thus the third image is accounted for.

M. Sanson, a distinguished French surgeon, has taken advantage of the above facts, to distinguish cataract from amaurosis, and has

* To be strictly accurate, it should be said that each of these images is double, for one is reflected from each surface of the glass, and these images are the more distinctly double, the thicker the glass.

been enabled to determine by this means some cases of supposed amaurosis to be in fact cataract, and has treated them successfully by operation.

Dr. Mackenzie, an eminent ophthalmologist of Glasgow, has also employed this means to determine the condition of the eye in glaucoma. Dr. Hays remarked that he had resorted to the catoptric examination of the eye in many cases, and believed that it would prove as valuable a means of diagnosis in some of the diseases of the eye, as auscultation is in those of the chest.

Dr. Hays exhibited and explained several models, designed and constructed by Dr. John Neill, resident surgeon at Wills' Hospital, for the purpose of illustrating the catoptric phenomena just explained.

Dr. Patterson communicated verbally a method of using thin sheets of lead by the blind, in writing, reading, and musical notation, invented by Mr. Joseph Saxton. The sheets of lead are three thousandths of an inch in thickness. Dr. Patterson presented specimens of the writing and musical notation.

Dr. Bache communicated the decease of Mr. George Pollok, a member of the Society, who died in April last.

Stated Meeting, May 17.

Present, twenty members.

Mr. Du Ponceau, President, in the Chair.

Letters were received from Mr. Thomas Townsend, and Mr. G. Riboni, and referred to committees.

The following donations were received:—

FOR THE LIBRARY.

Proceedings of the Committee of Agriculture and Commerce of the Royal Asiatic Society, from April, 1837, to November, 1838. London, 1837-38.—*From the Society.*